CEMEX Southeast, LLC
110 East Olive Road
Pensacola, Florida 32514

Operations and Maintenance Plan

Facility Description

This facility is a cement and fly ash distribution terminal, which includes six 208-ton capacity silos with baghouse filters. Cement or fly ash is received by railcars, which are unloaded by either pneumatic conveyor or pneumatic transfer pump into any of the six silos at a maximum rate of 100 tons per hour. Cement or fly ash is transferred from the silos to trucks for distribution at a maximum rate of 350 tons per hour. The facility's maximum throughput rate is 876,000 tons per year. Particulate matter (PM) emissions during silo loading are controlled by bag house filter, one per silo, with the dust collected being conveyed back into its respective silo. Particulate matter emissions during truck loading are controlled by an integrated loading spout filter system, with the filtered air exhausted horizontally from the spout during loading.

The facility was issued Air Operation Permit No. 0330093-005-AO, effective July 6, 2006. This Non-Title V permit expires on July 6, 2011. A permit renewal application was submitted March 24, 2011 and is currently under review. This Operations and Maintenance Plan addresses the following emissions unit: E.U. ID No. 001 – Cement and Fly Ash Distribution Terminal.

Applicable Emission Limits and Standards

Visible emissions are not to exceed 5% opacity. (Rule 62-4.070, F.A.C.). Visible emissions tests are required to demonstrate compliance with the standards of the FDEP. The test method required is EPA Method 9 (30 minute – silo loading). The test results must provide reasonable assurance that the source is capable of compliance at maximum loading rate and at representative operational conditions while loading and unloading cement or fly ash.

Test Methods and Procedures

An opacity test using the procedures described in EPA Method 9 – *Visible Determination of the Opacity of Emissions from Stationary Sources*, must be performed to determine if the 5 percent opacity limit is being exceeded.

The Terminal Manager (or a designated representative) will ensure that trained and certified Method 9 evaluators are available to properly perform the required Method 9 VE tests. CEMEX currently utilizes the services of Sanders Engineering & Analytical Services, Inc. The scheduling of subsequent ongoing compliance verification testing will be incorporated in the air operation permit. The FDEP will be notified at least 15 days prior to testing to allow witnessing. Results of testing will be submitted to the FDEP within 45 days after testing. Copies of the Method 9 tests will also be maintained in the Terminal Office air file.

As noted in the Method 9 procedures, evaluators will take care to perform the test from the proper location relative to the source and the sun, as well as to avoid degraded visibility of emissions caused by improper background contrast, ambient lighting, and observer position relative to lighting and wind.

During the Method 9 test, the evaluator should determine the opacity of the visible emissions plume at points above and beyond the baghouse exhaust vents and stacks. The evaluator will commence the test only after verifying the pneumatic transfer pump is operating. When performing the Method 9 VE test on the truck loading spout, the evaluator will stand on the opposite side of the truck scale and observe the exhaust fan. The evaluator will notify the Terminal Manager (or a designated representative) and initiate corrective action immediately if the Method 9 test indicates opacity exceeding 5 percent.

Prior to conducting the testing, the Terminal Manager, or his designated representative, will verify the amount of fly ash available in the rail car and ensure the designated tester is positioned in the correct

location to conduct each test. The Terminal Manager, or his designated representative, will verify and record the loading rate for each of the silos during the testing.

Preventive Maintenance for Silo Dust Collectors

In an effort to ensure proper operating conditions for the baghouses and prevent any fugitive dust emissions from the dust collectors, CEMEX will revise their preventative maintenance schedule from monthly to weekly. The inspection checklist includes the following items:

1. Check magnehelic gage readings for pressure drop.
2. Check door seals for leaks.
3. Check fan motor for vibrations
4. Check air supply and drain water from air tank.
5. Check air pulsing.
6. Check solenoid operation.
7. Check diaphragms.
8. Check control timer operations.
9. Check housing for cracks and leaks
10. Check for visible emissions.
11. Inspect bags and tighten any loose bags.

The facility's six silo baghouses and loading spout filter system will be operated and maintained in accordance with the manufacturer's recommendation. This includes the pressure drops during unloading and loading operations. (The manufacturer's recommended pressure differentials for each of the six silo baghouses and the loading spout are 1 to 9 inches of water and 2 to 11 inches of water, respectively.

All PM tasks will be performed in accordance with manufacturer's recommendations. Preventive maintenance work orders are maintained at the facility.

Truck Loading Spout Fugitive Dust Collection

The DEP representative observed sloughing off of fly ash coming from the point underneath the loading spout during an inspection on April 10, 2006. The Terminal Manager suggested that the amount of time that the vibrators are activated could be lengthened so that the fly ash would slough off into the truck. Facility personnel commenced reloading the truck and increased the length of time for vibrating the truck spout to 30 seconds to vibrate any fugitive flash in the truck spout hopper and spout sleeves. The testers, Sanders Engineering, then retested the truck loading spout. Since fly ash is a finer product, vibrating the truck spout for a minimum of thirty seconds versus ten seconds proved to be sufficient to successfully capture all of the fly ash dust. Additionally, some caking was observed at the bottom of the loading spout shoot. This may have contributed to some buildup of dust to settle in the crevices. The loading spout will be inspected and any caking will be removed during daily cleaning of the spout hopper, sleeve, and shoot.

The facility investigated the possibility of adding a sealing cone to the truck loading spout with the manufacturer, DCL. The installation would require an additional eighteen inches in vertical length. Currently, with the spout sleeves completely retracted, there is approximately seven inches above the truck's trailer. The installation of the sealing cone would require a major reconfiguration of the entire building since the dust collection system is directly below the silos.

Visible emissions testing for the truck loading spout will be conducted using EPA Method 22. The Terminal Manager, or his designated representative, will verify that the VE tester is positioned on the opposite side of the truck scale so that he can observe the exhaust point of the loading spout filter system. The Terminal Manager, or his designated representative, will verify and record the truck-loading rate during the testing.

Once a truck loading event is finished, the truck spout will be vibrated for a minimum of thirty seconds to vibrate any fugitive fly ash in the truck spout hopper and spout sleeves and capture it prior to the truck pulling away from the spout.